

A half century of clad coinage

1965-2015

Three factors

- Rising silver prices
- Increased collector demand
- Bag and roll collecting

Silver prices

Silver prices had been on the rise since World War II, partly because of increased industrial demand, especially for photography.

In 1943 the average silver price jumped from 38.3 cents to 44.75. In 1956, it topped 90 cents.

“If the price of silver rises sufficiently to make domestic coins an attractive source of silver for industrial use, the Mint will be faced with the monumental task of replacing the silver coinage in circulation.” - *February, 1963 Arthur D. Little consulting firm report.*

The price kept rising in the '60s

Average annual price of silver

- 1961 92 cents
- 1962 \$1.08521
- 1963 \$1.27912
- 1964 \$1.2930

On Sept. 1, 1963, silver set a 20th century record of \$1.293

Melt point of pre 1965 coins

- Silver dollars - \$1.29
- Silver dimes, quarters halves - \$1.38
- (Clad 40% 1965-1970 silver halves - \$3.38)

Collector demand

- By 1964, there were an estimated 5 million collectors in the United States.
- Coin World averaged 120 pages and boasted 170,000 readers
- Cleveland Plain Dealer added a weekly 2-page coin section.
- The 1959 change in the Lincoln cent reverse, the 1964 Kennedy half and the 1960 small date cent all stoked public interest, attracting more and more collectors.

Bag and roll collecting

If one was good, 50 was better and 1,000 was best.

Collectors started putting away roll sets of popular series, such as post World War II Lincoln cents, Jefferson nickels and Roosevelt dimes.

Investors put them away by the bag.

The bag aspect of the hobby quickly subsided. Collectors who “invested” in bags of 1960s cents and nickels are still trying to unload them.

Silver coins fared better, almost from the start, because of rising bullion prices.

The solution

In 1964, the Treasury Department hired Battelle Memorial Institute to study the problem and recommend solutions.

Battelle studied 17 metals to see how well they struck up, how much they looked like silver coins and how well they worked in the nation's vending machines.

Feb. 12, 1965 report

“A number of possible candidate materials were selected and taken to the Philadelphia Mint in the form of rolled strip to determine how well they could be blanked and upset, and coined. ... For the actual coining process, special dies were prepared by the Mint designers and engravers, which would duplicate as nearly as possible both the obverse and reverse design features of a typical dime, quarter, and half-dollar.” - *Final Report on A Study of Alloys Suitable for Use as United States Coinage*

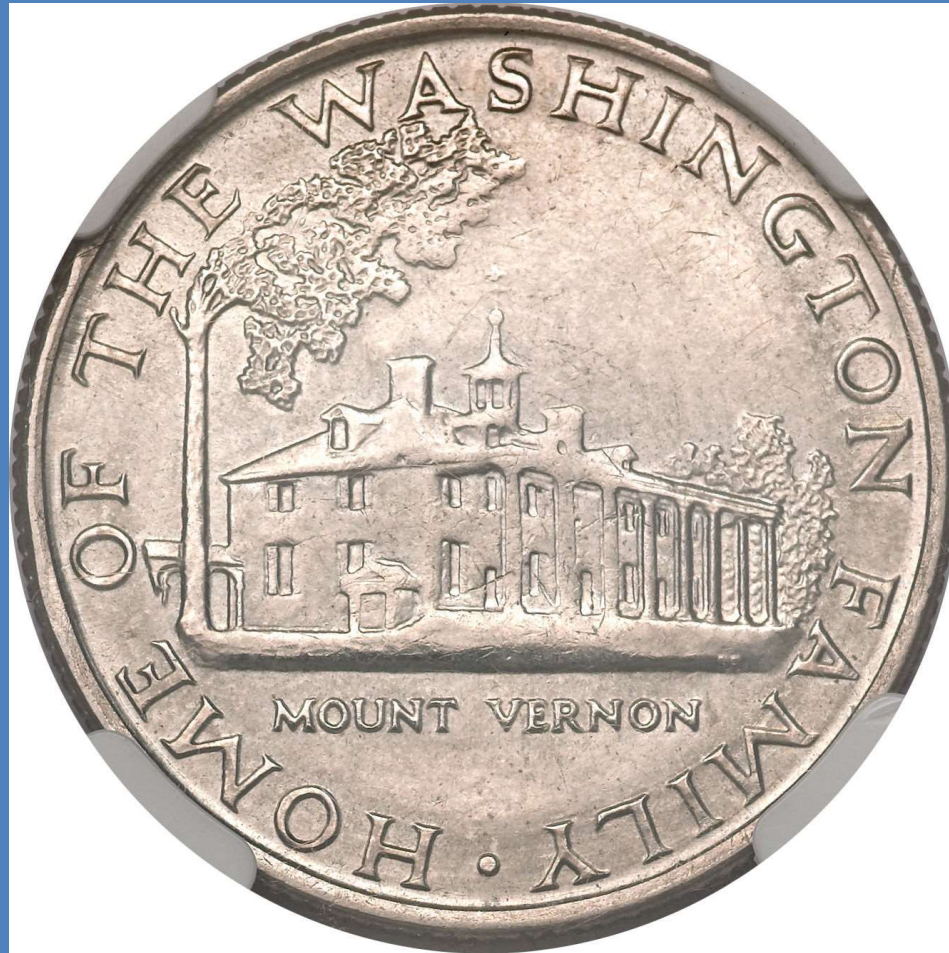
Battelle patterns

- The three Battelle pattern “denominations” show a bust of Martha Washington on the obverse and Mount Vernon on the reverse. All are dated 1759, the year George wed Martha.
- U.S. Mint Sculptor-Engraver Edward R. Grove designed the obverse and signed it with his initials below Martha’s bust. U.S. Mint Sculptor-Engraver Philip Fowler designed the reverse. His initials, which are often indistinct on the handful of surviving patterns, appear below the right side of Mount Vernon.

Battelle quarter obverse



Battelle quarter reverse



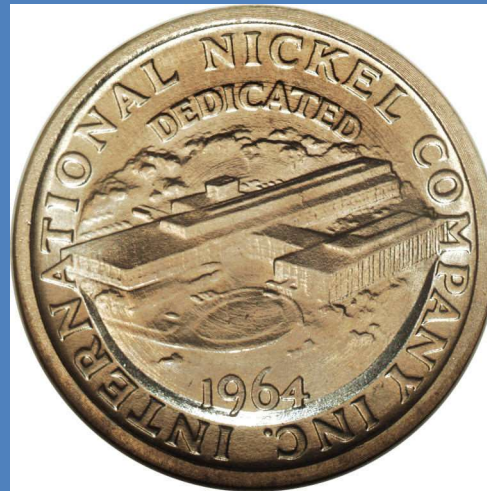
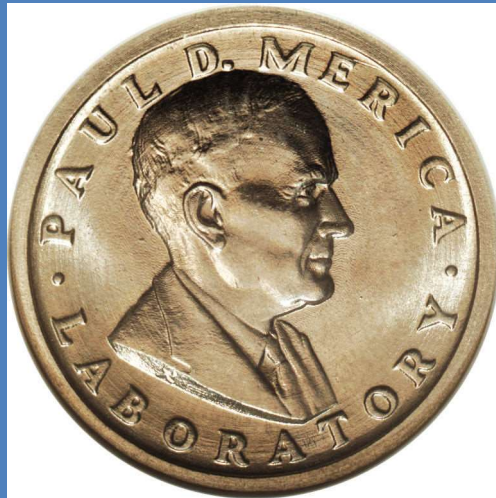
Private patterns

The International Nickel Co., August Frank for DuPont and Corning Glass Works also produced their own patterns.

The International Nickel Co., especially, went after the Mint's business with a vengeance, even commissioning Kennedy half dollar designer Gilroy Roberts to produce "coinlike" designs for private pattern dimes, quarter dollars and halves.

In early 1964, Inco produced an extensive series of private patterns featuring the date 1964 on the obverse and TEST PIECE No. on the reverse. In late summer, these were supplanted by the Roberts' designs showing former company president Paul D. Merica (who died in 1957) on the obverse and an aerial view of a lab dedicated in 1964 in his memory on the reverse. Roberts' famous GR monogram appears on the truncation of Merica's bust.

Inco pattern



DuPont pattern



Corning Glass pattern



The winner

Battelle recommended the now-familiar copper-nickel clad copper coins for dimes and quarters and 40 percent silver clad halves.

Silver was retained for halves for sentimental reasons. It was widely felt that U.S. coins should still have some silver in them.

Clad coin timetable

Sept. 3, 1964

President Johnson signs bill freezing date on dimes, quarters and half dollars

Sept. 8, 1964

Mint announces that coins minted after Dec. 31 will continue to bear the date 1964 to discourage hoarding.

July 23, 1965

President Lyndon B. Johnson signs bill to replace silver dimes and quarters with non-silver sandwich coins and half dollars with 40 percent sandwich coins.

Aug. 23, 1965

Philadelphia Mint strikes first sandwich coin – a quarter – at 10:30 a.m. The mints continue to produce 1964-dated silver coins.

Sept. 1, 1965

San Francisco Mint reactivated, begins producing cents that do not have a mint mark.

Nov. 1, 1965

230 million clad quarter dollars released into circulation.

Dec. 29, 1965

Mints begins striking cents and nickels with 1965 date.

Dec 30, 1965

Denver mint begins production of 1965 halves at 10 a.m.

January, 1966

Last silver quarter dollars struck

February, 1966

Last silver dimes struck

Feb 8, 1966

U.S. Rep. Dante B. Fascell of the Legal and Monetary Affairs Subcommittee reports, "Conditions have improved tremendously since that time (2 years ago). We know that stores generally are not encountering too much difficulty in making change."

March 9, 1966

Clad dimes and 40 percent silver half dollars released.

April, 1966

Last 90-percent silver half dollars struck

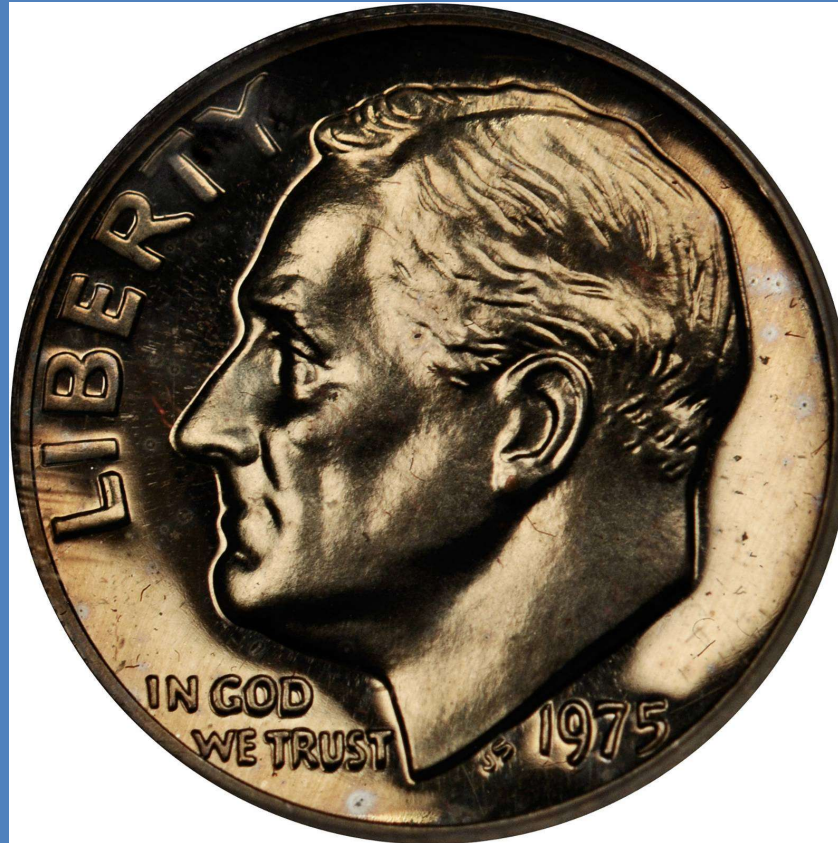
July 14, 1967

Treasury Department abandons silver ceiling of \$1.29 an ounce. Future sales are at the world market rate, \$1.68 an ounce.

Collecting clads

A complete clad coinage set contains one of the rarest United States coins and some of the most common.

Only two known



The 1975 No S Proof dime is a fabled rarity. Only two are known to collectors and no more have surfaced since the 1979 discovery of the second specimen. In 2011, one sold at auction, fetching \$349,600.

In 1968, 1970 and 1983 other No S proofs were struck. About a dozen 1968 No S dimes and 500 each of the 1970 and 1983 No S dimes are believed to exist.

Circulation-strike coins

Clad coins, which are struck by the billions each year, offer few opportunities for pocket-change collecting. None of the hundreds of date and Mint mark combinations is even remotely scarce.

Just three coins - a dime and two quarter-dollars – stand out as worth looking for, and all are errors.

1982 No P dime



The Philadelphia Mint neglected to place a Mint mark on two 1982 dies. The rarer of the two – called “strong strikes” by collectors – surfaced in Sandusky, Ohio. Many were unknowingly given out in change by Cedar Point Amusement Park. Less desirable coins came from the second or “weak strike” die. These were released in Pittsburgh.

2004 Wisconsin quarter



In 2004, another mint error captured the public's attention - 2004-D Wisconsin quarters with extra corn leaves. These were released in the Tucson, Ariz., area, though there have been scattered reports about finds in other parts of the country.

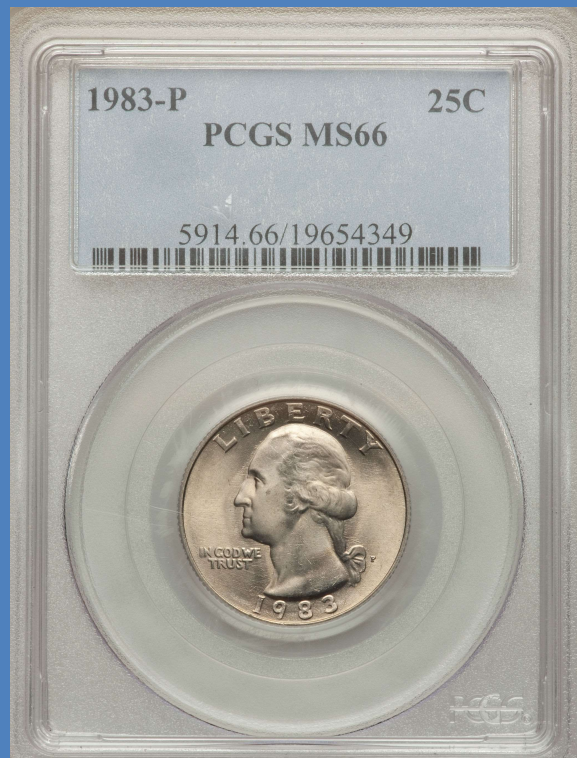
The extra-leaf quarters come in two varieties – low, in which the extra leaf on the left side of the ear of corn touches the round of cheese below; and high, in which the extra leaf touches another leaf above it.

Condition rarities

Some clad coins, especially from the early years, tend to be scarce to rare in ultra-high grades. Several dimes, quarters and half dollars command prices of \$500 to more than \$1,000 in MS-67 and higher.

Bridging the gap between ultra-high grade rarities and run of the mill coins are 1982 and 1983 quarter dollars. While mintages for 1982 P and D and 1983 P and D quarter dollars run in the half-billion range, almost all are dogs. The 1983-P is particularly hard to find in nice Uncirculated condition. The coin catalogs for \$25 in MS-60 in Coin World's Coin Values.

1983 quarter



Jaime Hernandez, PCGS price guide editor, notes, “The 1983-P Washington Quarter is a common date since the Mint produced them in mass quantities. However, in high grade condition the 1983-P ranks as one of the tougher issues in the clad Washington Quarter series.”

2 non-circulating circulation strikes

Some clad coins, notably the 1996-W dime and 1970-D half dollar, were produced as circulation strikes, but were not placed in circulation. The only way to get them was in Mint sets.

The 1996-W dime, the first dime to bear a West Point Mint mark, was placed in that year's Mint set to mark the 50th anniversary of the Roosevelt dime. In MS-65 the coin catalogs for \$25 in Coin World's Coin Values.

The 1970-D half dollar caught the collecting world by surprise. While it's bracketed by high-production Denver mintages, only 2.2 million were struck, all for placement in that year's Mint sets. In MS-65, the coin catalogs for \$65.